

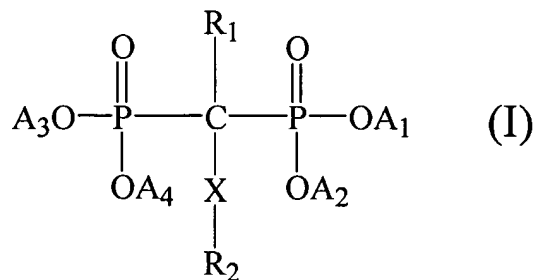
## AMENDMENTS TO THE CLAIMS

The following is a complete, marked up listing of revised claims with a status identifier in parentheses, underlined text indicating insertions, and strikethrough and/or double-bracketed text indicating deletions.

### LISTING OF CLAIMS

1.-14. (CANCELLED)

15. (PREVIOUSLY PRESENTED) A medicament for treating an autoimmune disease, comprising a treatment enhancing amount of a first active ingredient when in combination with a second active ingredient, wherein the first active ingredient is selected from the group consisting of bisphosphonic acids corresponding to general formula (I)



in which

A<sub>1</sub>, A<sub>2</sub>, A<sub>3</sub> and A<sub>4</sub> are independently selected from the group consisting of hydrogen, substituted and unsubstituted alkyl, substituted and unsubstituted

aryl, substituted and unsubstituted aralkyl, substituted and unsubstituted cycloalkyl, substituted and unsubstituted heterocyclic residues, metals of Groups I, II and III of the Periodic Table of the elements, and substituted and unsubstituted ammonium or ammonium compounds derived from ethylenediamine or amino acids,

X is absent or is selected from the group consisting of alkylene, alkenylene and hydroxyalkylene,

R<sub>1</sub> and R<sub>2</sub> are independently selected from the group consisting of H, OH, -NH<sub>2</sub>, substituted and unsubstituted acyl, substituted and unsubstituted alkyl, substituted and unsubstituted aryl, substituted and unsubstituted cycloalkyl, substituted and unsubstituted aralkyl, substituted and unsubstituted heterocyclic residues, -SR<sub>3</sub>, Cl and -NR<sub>3</sub>R<sub>4</sub>,

in which

R<sub>3</sub> and R<sub>4</sub> are independently selected from the group consisting of H, OH, substituted and unsubstituted acyl, substituted and unsubstituted alkyl, substituted and unsubstituted aryl, substituted and unsubstituted aralkyl, substituted and unsubstituted cycloalkyl and substituted and unsubstituted heterocyclic residues, their pharmaceutically compatible salts, esters thereof, salts of the esters and compounds, which upon administration from the compounds according to formula (I) or their salts or esters as metabolites or catabolites,

and a treatment enhancing amount of a second active ingredient when in combination with the first active ingredient, wherein

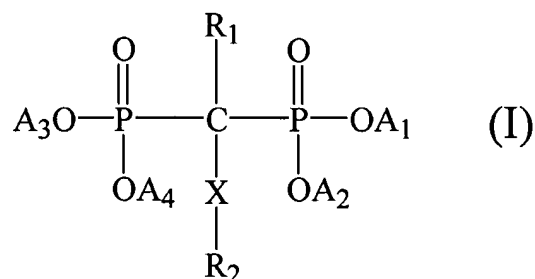
said second active ingredient is at least one autoantigen specific for the autoimmune disease to be treated and selected from the group consisting of nervous system tissue extracts, collagen, thyroglobulin, acetylcholine receptor protein, DNA, islet cell extracts, human insulin, liver extracts, adrenal cortex extracts, skin extracts, muscle extracts, haemopoietic cell line extracts, heart extracts, eye lens proteins, S-antigens, gastric cell extracts, parietal cell extracts, intrinsic factor, and intestinal extracts; and  
an excipient.

16. (PREVIOUSLY PRESENTED) The medicament of claim 15, wherein the bisphosphonic acid is selected from the group consisting of

$R_1$  is selected from the group consisting of H, OH,  $-NH_2$

$R_2$  is selected from the group consisting of H, OH,  $-NH_2$ , substituted and unsubstituted acyl, substituted and unsubstituted alkyl having 1 to 12 carbon atoms, substituted and unsubstituted aryl, substituted and unsubstituted cycloalkyl, substituted and unsubstituted aralkyl, substituted and unsubstituted heterocyclic residues,  $-SR_3$ , C1 and  $-NR_3R_4$ .

17. (PREVIOUSLY PRESENTED) A medicament for treating an autoimmune disease, comprising  
a treatment enhancing amount of a first active ingredient when in combination with a second active ingredient, wherein the first active ingredient is selected from the group consisting of bisphosphonic acids corresponding to general formula (I)



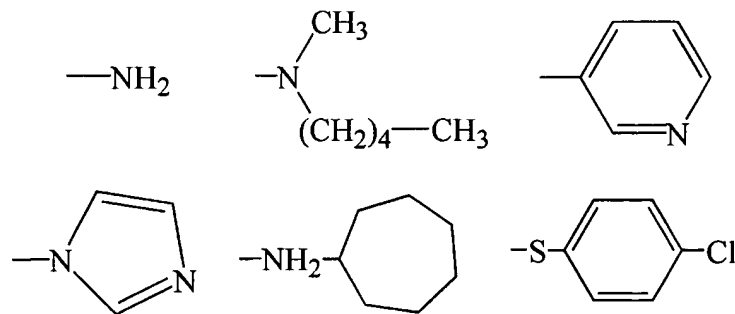
in which

A<sub>1</sub>, A<sub>2</sub>, A<sub>3</sub> and A<sub>4</sub> are independently selected from the group consisting of hydrogen, substituted and unsubstituted alkyl, substituted and unsubstituted aryl, substituted and unsubstituted aralkyl, substituted and unsubstituted cycloalkyl, substituted and unsubstituted heterocyclic residues, metals of Groups I, II and III of the Periodic Table of the elements, and substituted and unsubstituted ammonium or ammonium compounds derived from ethylenediamine or amino acids,

X is absent or is selected from the group consisting of (CH<sub>2</sub>)<sub>1-5</sub> and amidino,

R<sub>1</sub> is selected from the group consisting of H and OH, and

R<sub>2</sub> is selected from the group consisting of



their pharmaceutically compatible salts, esters thereof, salts of the esters

and compounds, which upon administration form the compounds according to formula (I) or their salts or esters as metabolites or catabolites, and

a treatment enhancing amount of a second active ingredient when in combination with the first active ingredient,

wherein said second active ingredient is at least one autoantigen specific for the autoimmune disease to be treated and selected from the group consisting of nervous system tissue extracts, collagen, thyroglobulin, acetylcholine receptor protein, DNA, islet cell extracts, human insulin, liver extracts, adrenal cortex extracts, skin extracts, muscle extracts, haemopoetic cell line extracts, heart extracts, eye lens proteins, S-antigens, gastric cell extracts, parietal cell extracts, intrinsic factor, and intestinal extracts; and

an excipient.

18. (PREVIOUSLY PRESENTED) The medicament of claim 15, wherein the autoantigen is selected from the group consisting of nervous system tissue extracts, islet cell extracts, liver extracts, adrenal cortex extracts, skin extracts, muscle extracts, haemopoetic cell line extracts, heart extracts, gastric cell extracts, parietal cell extracts, and intestinal extracts.
19. (PREVIOUSLY PRESENTED) The medicament of claim 52, wherein the allergen is pollen.
20. (PREVIOUSLY PRESENTED) A medicament according to claim 15 where in the

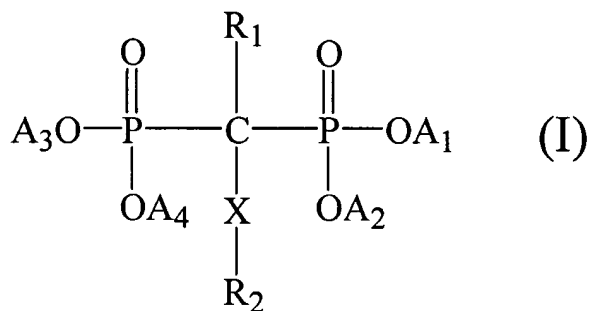
medicament is

present in a form selected from the group consisting of solid form, ointment, solution, and spray.

21.-51. (CANCELLED)

52. (PREVIOUSLY PRESENTED) A medicament for treating an allergy, comprising:  
a treatment enhancing amount of a first active ingredient when in combination  
with a second active ingredient, wherein the first active ingredient is selected  
from the group consisting of

bisphosphonic acids corresponding to general formula (I)



in which

A<sub>1</sub>, A<sub>2</sub>, A<sub>3</sub> and A<sub>4</sub> are independently selected from the group consisting  
of hydrogen, substituted and unsubstituted alkyl, substituted and unsubstituted  
aryl, substituted and unsubstituted aralkyl, substituted and unsubstituted  
cycloalkyl, substituted and unsubstituted heterocyclic residues, metals of  
Groups I, II and III of the Periodic Table of the elements, and substituted and  
unsubstituted ammonium or ammonium compounds derived from

ethylenediamine or amino acids,

X is absent or is selected from the group consisting of alkylene,  
alkenylene and hydroxyalkylene,

R<sub>1</sub> and R<sub>2</sub> are independently selected from the group consisting of H, OH,  
-NH<sub>2</sub>, substituted and unsubstituted acyl, substituted and unsubstituted alkyl,  
substituted and unsubstituted aryl, substituted and unsubstituted cycloalkyl,  
substituted and unsubstituted aralkyl, substituted and unsubstituted heterocyclic  
residues, -SR<sub>3</sub>, Cl and -NR<sub>3</sub>R<sub>4</sub>,

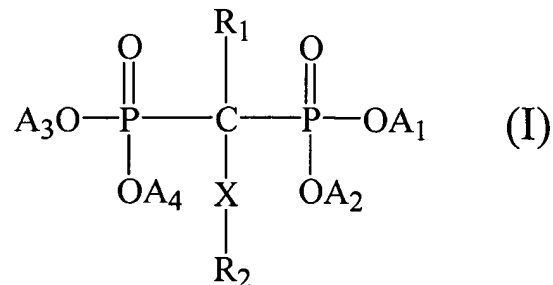
in which

R<sub>3</sub> and R<sub>4</sub> are independently selected from the group consisting of H, OH,  
substituted and unsubstituted acyl, substituted and unsubstituted alkyl, substituted  
and unsubstituted aryl, substituted and unsubstituted aralkyl, substituted and  
unsubstituted cycloalkyl and substituted and unsubstituted heterocyclic residues,  
their pharmaceutically compatible salts, esters thereof, salts of the esters and  
compounds, which upon administration from the compounds according to formula  
(I) or their salts or esters as metabolites or catabolites,

and a treatment enhancing amount of a second active ingredient when in  
combination with the first active ingredient, wherein said second active ingredient  
is an allergen ingredient specific for the allergy to be treated and is selected from  
the group consisting of pollen, nickel, and food; and

an excipient.

53. (PREVIOUSLY PRESENTED) A medicament for treating an allergy, comprising:  
a treatment enhancing amount of a first active ingredient when in combination with a  
second active ingredient, wherein the first active ingredient is selected from the group  
consisting of bisphosphonic acids corresponding to general formula (I)



in which

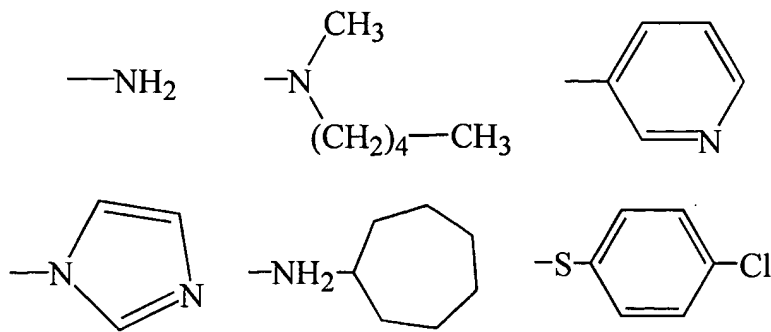
A<sub>1</sub>, A<sub>2</sub>, A<sub>3</sub> and A<sub>4</sub> are independently selected from the group consisting  
of hydrogen, substituted and unsubstituted alkyl, substituted and unsubstituted  
aryl, substituted and unsubstituted aralkyl, substituted and unsubstituted  
cycloalkyl, substituted and unsubstituted heterocyclic residues, metals of Groups  
I, II and III of the Periodic Table of the elements, and substituted and  
unsubstituted ammonium or ammonium compounds derived from  
ethylenediamine or amino acids,

X is absent or is selected from the group consisting of (CH<sub>2</sub>)<sub>1-5</sub> and  
amidino,

R<sub>1</sub> is selected from the group consisting of H and OH, and

R<sub>2</sub> is selected from the group consisting of





their pharmaceutically compatible salts, esters thereof, salts of the esters and compounds, which upon administration form the compounds according to formula (I) or their salts or esters as metabolites or catabolites, and

a treatment enhancing amount of a second active ingredient when in combination with the first active ingredient, wherein said second active ingredient is an allergen ingredient specific for the allergy to be treated and selected from the group consisting of pollen, nickel, and food; and

an excipient.

54. (PREVIOUSLY PRESENTED) The medicament of claim 15, wherein the autoantigen is from a nervous system tissue extract and the autoantigen is myelin basic protein.
55. (PREVIOUSLY PRESENTED) The medicament of claim 15, wherein the autoantigen is selected from the group consisting of collagen, thyroglobulin, acetylcholine receptor protein, human insulin, eye lens proteins, S-antigens, and intrinsic factor.

56. (PREVIOUSLY PRESENTED) The medicament of claim 15, wherein the autoantigen is DNA.
57. (PREVIOUSLY PRESENTED) The medicament of Claim 52, wherein the allergen ingredient is food.
58. (PREVIOUSLY PRESENTED) The medicament of Claim 15 wherein the bisphosphonic acid is an amino-1-hydroxyalkylidene-1,1-bisphosphonic acid wherein the alkyl is methyl, ethyl, propyl, butyl, or hexyl.
59. (CURRENTLY AMENDED) The medicament of Claim 15 wherein the bisphosphonic acid is amidinomethylenebisphosphonic acid, ~~ibandronic acid~~, risedronic acid, zoledronic acid, cimidronic acid, or tiludronic acid.
60. (PREVIOUSLY PRESENTED) The medicament of Claim 52 wherein the bisphosphonic acid is an amino-1-hydroxyalkylidene-1,1-bisphosphonic acid wherein the alkyl is methyl, ethyl, propyl, butyl, or hexyl.
61. (CURRENTLY AMENDED) The medicament of Claim 52 wherein the bisphosphonic acid is amidinomethylenebisphosphonic acid, ~~ibandronic acid~~, risedronic acid, zoledronic acid, cimidronic acid, or tiludronic acid.
62. (PREVIOUSLY PRESENTED) The medicament of Claim 15 wherein the

- bisphosphonic acid is an amino-1-hydroxyalkylidene-1,1-bisphosphonic acid wherein the alkyl is methyl, ethyl, propyl, butyl, or hexyl; and the autoantigen is from a nervous system tissue extract and is myelin basic protein.
63. (PREVIOUSLY PRESENTED) The medicament of Claim 15 wherein the bisphosphonic acid is an amino-1-hydroxyalkylidene-1,1-bisphosphonic acid wherein the alkyl is methyl, ethyl, propyl, butyl, or hexyl; and the autoantigen is collagen.
64. (PREVIOUSLY PRESENTED) The medicament of Claim 15 wherein the bisphosphonic acid is an amino-1-hydroxyalkylidene-1,1-bisphosphonic acid wherein the alkyl is methyl, ethyl, propyl, butyl, or hexyl; and the autoantigen is insulin,
65. (PREVIOUSLY PRESENTED) The medicament of Claim 15 wherein the bisphosphonic acid and the autoantigen are present in a form for separate administration.

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